

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2004/052706

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 G02B5/02 G02F1/1335

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/002153 A1 (HIRAISHI MASANORI ET AL) 2 January 2003 (2003-01-02) the whole document -----	16-26
A	US 2001/003473 A1 (GALABOVA CHRISTINA G ET AL) 14 June 2001 (2001-06-14) the whole document -----	1-15
A	US 6 346 311 B1 (YEO TERRY ET AL) 12 February 2002 (2002-02-12) abstract -----	16-26
A	US 5 281 370 A (ASHER ET AL) 25 January 1994 (1994-01-25) column 6, line 65 - column 7, line 36; figure 3 -----	1-26

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

27 May 2005

Date of mailing of the international search report

22/06/2005

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/IB2004/052706

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003002153	A1 02-01-2003	JP 2002216521 A JP 2002214412 A EP 1329746 A1 WO 0233450 A1	02-08-2002 31-07-2002 23-07-2003 25-04-2002
US 2001003473	A1 14-06-2001	US 2002085151 A1 US 2002012766 A1 US 5940150 A US 6338807 B1 US 6133980 A US 6034753 A US 6188460 B1 US 5691789 A US 5599412 A US 5364557 A US 2002113921 A1 US 2004095531 A1 AU 4206600 A CA 2369364 A1 CN 1359479 A EP 1175639 A1 JP 2002541515 T WO 0060407 A1 US 6671008 B1 US 2004160538 A1 US 2004141120 A1 US 2002118328 A1 AU 8390898 A EP 0994775 A1 JP 2001509520 T WO 9902340 A1 US 2004247824 A1 US 2004247825 A1 US 6404464 B1 AU 6439498 A EP 0968456 A1 JP 2001513908 T US 6072549 A US 6661486 B1 US 2002039156 A1 WO 9838547 A1 US 2003071937 A1 US 2002057400 A1 US 2002041346 A1 US 2003210373 A1 US 6535268 B1 US 2004095523 A1 US 2004150772 A1 US 2005007505 A1 US 2005007506 A1 US 2004011995 A1 US 2004061819 A1 US 2002020829 A1 AT 236970 T AU 5245298 A	04-07-2002 31-01-2002 17-08-1999 15-01-2002 17-10-2000 07-03-2000 13-02-2001 25-11-1997 04-02-1997 15-11-1994 22-08-2002 20-05-2004 23-10-2000 12-10-2000 17-07-2002 30-01-2002 03-12-2002 12-10-2000 30-12-2003 19-08-2004 22-07-2004 29-08-2002 08-02-1999 26-04-2000 24-07-2001 21-01-1999 09-12-2004 09-12-2004 11-06-2002 18-09-1998 05-01-2000 04-09-2001 06-06-2000 09-12-2003 04-04-2002 03-09-1998 17-04-2003 16-05-2002 11-04-2002 13-11-2003 18-03-2003 20-05-2004 05-08-2004 13-01-2005 13-01-2005 22-01-2004 01-04-2004 21-02-2002 15-04-2003 29-05-1998
US 6346311	B1 12-02-2002	NONE	

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

**PCT/IB2004/052706**

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 5281370	A	25-01-1994	US 6123845 A	26-09-2000
			US 6001251 A	14-12-1999
			US 5711884 A	27-01-1998
			US 5944994 A	31-08-1999